bryant

BryantAir Conditioning

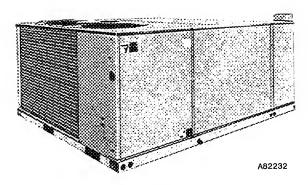
Indianapolis, IN City of Industry, CA

GAS HEATING/ ELECTRIC COOLING ROOFTOP UNIT

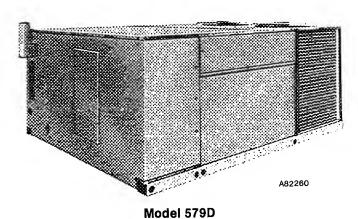
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Models 585E & 579D

Sizes 090146 & 090203



Model 585E



Models 579D and 585E Gas Heating/Electric Cooling Rooftop Units are single-packaged units designed for the commercial market. Both models present a low profile and do not distract from the architecture of the building.

MODEL 585E is designed for horizontal side-by-side duct connections and can be installed at ground level or on a roof. The 585E is ideal for the replacement market.

MODEL 579D has the supply- and return-air openings on the bottom of the unit. The 579D is designed for rooftop installation and mounts on a factory-supplied, roof-mounting curb. The ductwork connects to the curb so that the air ducts and curb can be installed before unit arrival.

FEATURES

FACTORY-ASSEMBLED PACKAGE is a compact, fully self-contained, combination gas heating/electric cooling unit that is prewired, prepiped, and precharged for minimum installation time and expense.

TWO RUGGED, HIGH-EFFICIENCY COMPRESSORS provide two-stage cooling to conserve energy by shutting down one compressor during light cooling loads. These compressors are electrically and mechanically independent; therefore, cooling is still available even if one stage fails.

LOW-PRESSURE PROTECTION is standard.

TWO-STAGE HEATING AND TWO-STAGE COOLING reduces equipment cycling and gives better control of the conditioned space temperature and humidity.

INTERMITTENT SPARK IGNITION that lights pilot only on a "call for heat" by the indoor thermostat. An LP (propane) conversion kit is available for both models.

HIGH-EFFICIENCY, FOUR-PASS HEAT EXCHANGER—The four-pass tubular heat exchanger design provides maximum heat transfer to the heated area.

POSITIVE-PRESSURE COMBUSTION AND MECHANICAL FLUE GAS VENTING are unaffected by adverse wind conditions.

CRANKCASE HEATERS AND FILTER-DRIERS are standard on both models.

WEATHERIZED CABINETS are constructed of heavy-duty, phosphated, zinc-coated steel and finished with corrosion-resistant, modified alkyd, fade-resistant, baked Malibu Beige enamel. Interior surfaces of the evaporator/heat exchanger compartment are insulated to help keep the conditioned air from being affected by the outdoor ambient temperature.

VERTICAL CONDENSER AIR DISCHARGE prevents recirculation of hot condenser air and reduces operating noise level.

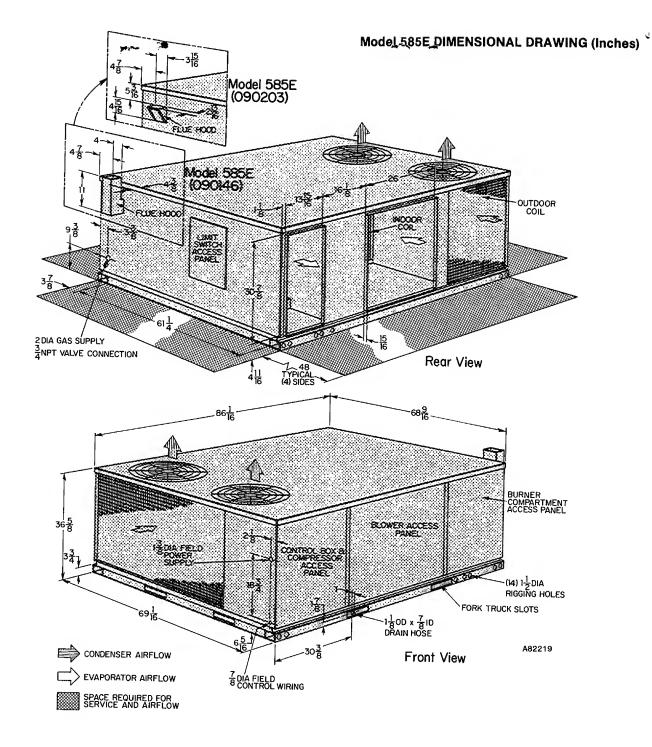
COMPRESSOR ISOLATION MOUNTING eliminates vibration (noise) transmission to building structure.

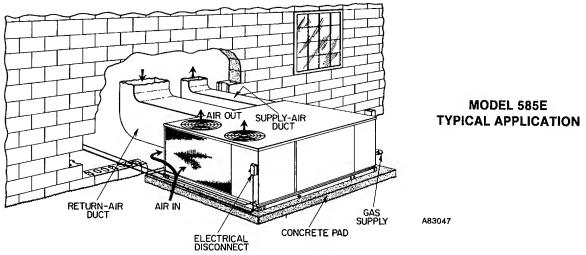
CORROSION-RESISTANT HEAT EXCHANGERS AND BURN- ERS for longer life.

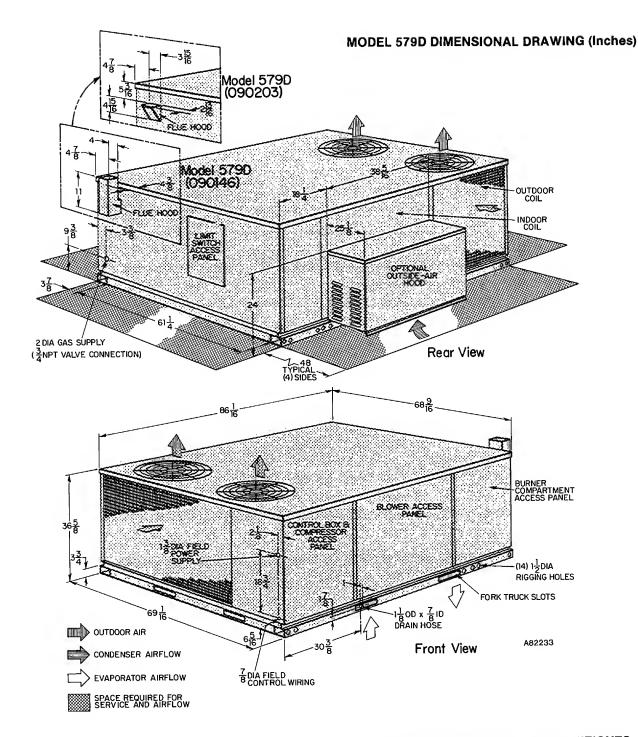
FURNACE SAFETY CONTROLS shut off gas in event of pilot outage, combustion-air failure, overheating of heat exchangers, or flame rollout.

PROTECTION AS REQUIRED BY N.E.C. for fan motors.

COMPROTEC®—standard on both models, prevents compressor rapid-cycling.





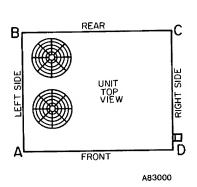


OPTIONAL OUTSIDE-AIR | 6\frac{1}{16} | 8\frac{1}{8} | 19\frac{5}{16} | 10\frac{1}{16} | 10\

UNIT OPERATING AND CORNER WEIGHTS

Operating		Corner	Weights	
Weight	Α	В	С	D
1180*	367	244	228	341

*Add 60 pounds to unit if equipped with modulating economizer



MODEL	585EP090146	585EE090146	579DP090146	579DE090146
SERIES RATINGS & PERFORMANCE	C	С	C	C
Cooling				
Total Capacity (Btuh)*		,000		,000
Capacity Reduction Rated Airflow (Ft³/Min)*		0%		0%
Rated ESP (in. wc)*		000 .25		000
EER		3.2		.25 3.2
ARI Noise Rating†		1.0		0.0
Heating				
1st-Stage Input (Btuh) 1st-Stage Output (Btuh)		,000		,000
1st- & 2nd-Stage Input (Btuh)		6,600 6,000		,600 ,000
1st- & 2nd-Stage Output (Btuh)		5,800		5.800
Temperature Rise Range (°F)		-50		-50
Thermal Efficiency (%) Certified ESP (In. wc)		30		30
ELECTRICAL	1	.1	. 1	.1
Unit Volts—Phase (60 Hz)	208/230-3	460-3	208/230-3	460-3
Operating Voltage Range	187-253	414-506	187-253	414-506
Unit Full Load Amps	42.7	20.7	42.7	20.7
Min Ampacity for Wire Sizing Min Wire Size (75 ° C Copper) ±	48	23	48	23
Max Wire Length (Ft)‡	6 140	10 255	6 140	10 255
Max Fuse Size (Amps)	60	25	140	255
Control Transformer, 24-V (VA)	75	75	75	75
COMPRESSOR, REFRIGERANT, & CONTROLS				
Compressor No. 1 (Type—RPM) Rated Load Amps	Hermetic — 3500	Hermetic—3500	Hermetic—3500	Hermetic—3500
Locked Rotor Amps	15.2 80	7.2	15.2 80	7.2
Compressor No. 2 (Type—RPM)	Hermetic—3500	Hermetic—3500	Hermetic — 3500	35 Hermetic—3500
Rated Load Amps	15.2	7.2	15.2	7.2
Locked Rotor Amps	80	35	80	35
Compressor Protection Low-Pressure Switch (PSIG)		Linebreak		Linebreak
Low-Ambient Operation (°F)		, Reset 67 5		, Reset 67
Refrigerant Charge		10	4	15
Compressor No. 1 Circuit	6 lbs	3 oz	6 lbs	3 oz
Compressor No. 2 Circuit		3 oz		3 oz
INDOOR COIL Rows & Fins per Inch				
Coil Face Area (Sq Ft)		.15 .9		15
Refrigerant Metering Device	Capillar			.9 y Tubes
INDOOR BLOWER & MOTOR		y 10000	оаршаг	y 10003
Wheel Dia & Width (In.)	12)			x 12
Blower Pulley Pitch Dia & Bore (In.) Factory-Supplied Filters (In.)		3/4		3/4
Required Filter Area (Sq In.)**	No	ine	(2) 16 x 20 x 2,	(2) 20 x 20 x 2
Disposable Type	11	52		_
Cleanable- or High-Capacity Type	93		<u> </u>	<u> </u>
Blower Motor HP & SF	1.5 & 1.3	1.5 & 1.3	1.5 & 1.3	1.5 & 1.3
Speed (Nominal RPM) Full Load Amps	1725	1725	1725	1725
Motor Pulley Pitch Dia & Bore (In.)	6.5	4 & 5/8	6.5	3.3 4 & 5/8
Belt Length & Width (In.)	46 Pitch Le			4 & 5/6 ength & 1/2
OUTDOOR COIL			TO TROIT EX	Jingur & 172
Rows & Fins per Inch	2 &			14
Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR	15	5.6	15	5.6
Outdoor Fans, No.—Dia	2-22	2-22	2-22	2—22
Motor HP	1/2	1/2	1/2	1/2
Type—Speed	PSC-1075	PSC-1075	PSC-1075	PSC-1075
Full Load Amps	2.9 Each	1.5 Each	2.9 Each	1.5 Each
GAS CONTROLS & GENERAL DATA		nehot		
Burners (No —Tyne)	4 le	DIRE		nshot
Burner Orifices (No.—Drill Size), Natural	4Ir		4-33	
	4—lr 4— 4—	-33		
Burner Orifices (No. — Drill Size), Natural Burner Orifices (No. — Drill Size), Propane Main Gas Valve	4- 4- 24-V Re	33 50 dundant	4-	
Burner Orifices (No. — Drill Size), Natural Burner Orifices (No. — Drill Size), Propane Main Gas Valve Pilot (Non-100%)	4- 4- 24-V Re Crossov	33 50 dundant er Tube	4- 24-V Re Crossov	50 dundant er Tube
Burner Orifices (No. — Drill Size), Natural Burner Orifices (No. — Drill Size), Propane Main Gas Valve Pilot (Non-100%) Pilot Ignition	4- 4- 24-V Re Crossov Spa	33 50 dundant er Tube ark	4- 24-V Re Crossov Spi	50 dundant er Tube ark
Burner Orifices (No. — Drill Size), Natural Burner Orifices (No. — Drill Size), Propane Main Gas Valve Pilot (Non-100%) Pilot Ignition High Limit	4- 4- 24-V Re Crossov Spa Cutout 110	-33 -50 dundant er Tube ark), Reset 90	4- 24-V Re Crossov Spi Cutout 110	-50 dundant er Tube ark), Reset 90
Burner Orifices (No. — Drill Size), Natural Burner Orifices (No. — Drill Size), Propane Main Gas Valve Pilot (Non-100%) Pilot Ignition	4- 4- 24-V Re Crossov Spa	33 50 dundant er Tube ark J, Reset 90	4- 24-V Re Crossov Spi Cutout 110	-50 dundant er Tube ark J, Reset 90 I Reset

^{*}Rated in accordance with ARI Standard 210-81







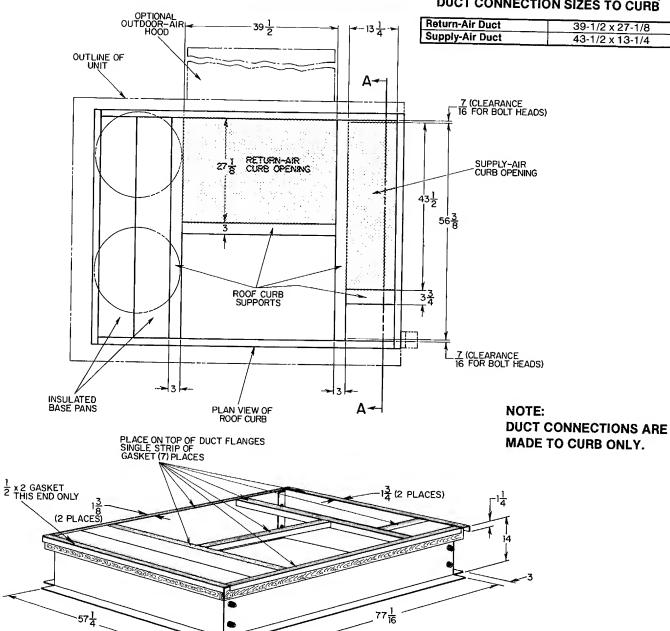
[†]Rated in accordance with ARI Standard 270-82

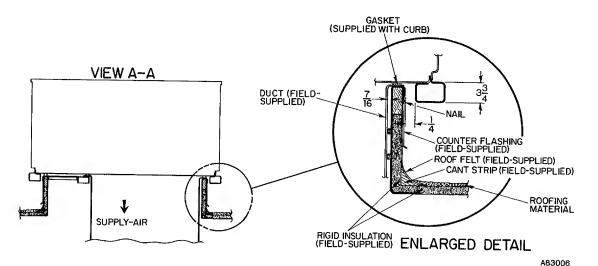
[‡]If other than 75°C copper wire is used, determine size from unit ampacity and the National Electrical Code Voltage drop of wire must be less than 2% of unit rated voltage. Maximum wire length shown is for one way along the wire path from unit to electrical service panel
**Model 585E only Model 579D is equipped with two 20- x 20- x 2-inch and two 16- x 20- x 2-inch filters

DEL	585EP090203	585EE090203	579DP090203	579DE090203 C		
RIES	C	C	C			
ATINGS & PERFORMANCE						
oling	92,00	00	92,0			
Fotal Capacity (Btuh)* Capacity Reduction	50%		50'			
Rated Airflow (Ft³/Min)*	300		300			
Rated ESP (In. wc)*	0.2		0.2 8.			
ER	8.2					
ARI Noise Rating†	9.0	J	9.0			
ating	125,0	nnn	125,000			
1st-Stage Input (Btuh)	92,5		92,	500		
1st-Stage Output (Btuh)	203.0		203,			
1st- & 2nd-Stage Input (Btuh) 1st- & 2nd-Stage Output (Btuh)	160,3	370	160,			
Temperature Rise Range (°F)	35-	-65	35-			
Thermal Efficiency (%)		79 79				
Certified ESP (In. wc)	1.	1	1.1			
LECTRICAL	000/020 2	460-3	208/230-3	460-3		
nit Volts—Phase (60 Hz)	208/230-3 187-253	414-506	187-253	414-506		
erating Voltage Range	42.7	20.7	42.7	20.7		
nit Full Load Amps in Ampacity for Wire Sizing	48	23	48	23		
in Wire Size (75°C Copper)‡	6	10	6	10		
ax Wire Length (Ft)‡	140	255	140	255		
ax Fuse Size (Amps)	60	25	60	25 75		
ontrol Transformer, 24-V (VA)	75	75	75	/0		
COMPRESSOR, REFRIGERANT, & CONTROLS	11	Hermetic-3500	Hermetic-3500	Hermetic-3500		
ompressor No. 1 (Type—RPM)	Hermetic—3500 15.2	7.2	15.2	7.2		
Rated Load Amps	80	35	80	35		
Locked Rotor Amps	Hermetic—3500	Hermetic-3500	Hermetic-3500	Hermetic—3500		
Compressor No. 2 (Type—RPM)	15.2	7.2	15.2	7.2		
Rated Load Amps Locked Rotor Amps	80	35	80	35		
ompressor Protection	Internal I	inebreak		Linebreak		
ow-Pressure Switch (PSIG)	Cutout 27	, Reset 67		', Reset 67		
ow-Ambient Operation (°F)	4	15	45			
Refrigerant Charge			6 lbs 3 oz			
Compressor No. 1 Circuit		3 0z	6 lbs 3 oz 6 lbs 3 oz			
Compressor No. 2 Circuit	6 IDS	3 0Z	Ų II			
NDOOR COIL	3.8	ኔ 15	3 (§ 15		
Rows & Fins per Inch		7.9		7.9		
Coil Face Area (Sq Ft) Refrigerant Metering Device		ry Tubes	Capilla	ry Tubes		
INDOOR BLOWER & MOTOR				- 10		
Wheel Dia & Width (In.)		x 12		x 12 3 3/4		
Blower Pulley Pitch Dia & Bore (in.)		k 3/4		2, (2) 20 x 20 x 2		
Factory-Supplied Filters (In.)	5.8 N	une	(2) 16 X 2U X 2	7 (2)		
Required Filter Area (Sq In)**	No.		(2) 16 X 20 X 2	_		
Required Filter Area (Sq In)** Disposable Type	N 1	152	(2) 16 X 2U X 2			
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type	1 9	152 936	(2) 16 X 20 X 2			
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF	1 1 9 1.5 & 1.3	152 136 1.5 & 1.3		1.5 & 1.3 1725		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM)	1 9	152 936	1.5 & 1.3 1725 6.5	1.5 & 1.3 1725 3.3		
Required Filter Area (Sq In)** Disposable Type Cleanable· or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps	1.5 & 1.3 1.725 6.5	152 336 1.5 & 1.3 1725 3.3	1.5 & 1.3 1725 6.5	1.5 & 1.3 1725 3.3 3.4 & 5/8		
Required Filter Area (Sq In)** Disposable Type Cleanable· or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.)	1.5 & 1.3 1.725 6.5	152 936 1.5 & 1.3 1725 3.3	1.5 & 1.3 1725 6.5	1.5 & 1.3 1725 3.3		
Required Filter Area (Sq In)** Disposable Type Cleanable: or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.)	N. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L	152 336 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2	1.5 & 1.3 1725 6.5 2.4— 46 Pitch	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2		
Required Filter Area (Sq In)** Disposable Type Cleanable or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps	N. 1: 9 1.5 & 1.3 1.725 6.5 2.4—3 46 Pitch L	152 136 1.5 & 1.3 1725 3.3 & 4.8 5/8 ength & 1/2	1.5 & 1.3 1725 6.5 2.4- 46 Pitch	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2		
Required Filter Area (Sq In)** Disposable Type Cleanable: or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOR GOIL Rows & Fins per Inch Coil Face Area (Sq Ft)	N. 1: 9 1.5 & 1.3 1.725 6.5 2.4—3 46 Pitch L	152 336 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2	1.5 & 1.3 1725 6.5 2.4- 46 Pitch	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2		
Required Filter Area (Sq In)** Disposable Type Cleanable· or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR	N. 1: 9 1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6	1.5 & 1.3 1725 6.5 2.4- 46 Pitch	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6		
Required Filter Area (Sq In)** Disposable Type Cleanable· or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia	N. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L	152 136 1.5 & 1.3 1725 3.3 & 4.8 5/8 ength & 1/2	1.5 & 1.3 1725 6.5 2.4- 46 Pitch	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6		
Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP	N. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2 2—22 1/2	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 15.6	1.5 & 1.3 1725 6.5 2.4– 46 Pitch 2 2–22 1/2 PSC–1075	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed	N. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L	152 336 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 15.6 2-22 1/2	1.5 & 1.3 1725 6.5 2.4- 46 Pitch	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps	No. 11.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2 172 172 PSC-1075 2.9 Each	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2—22 1/2 PSC—1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each		
Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA	No. 11.5 & 1.3 1.725 6.5 2.4—3 46 Pitch L 2 1.2 1.2 PSC—1075 2.9 Each	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2—22 1/2 PSC—1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burner (No.—Type) Burner Orifices (No.—Drill Size), Natural	No. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2 1 2—22 1/2 PSC—1075 2.9 Each	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2–22 1/2 PSC—1075 2.9 Each	1.5 & 1.3 1725 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each		
Disposable Type Cleanable- or High-Capacity Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dla Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural	N. 1: 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2 2 1/2 PSC—1075 2.9 Each	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4– 46 Pitch 2 2–22 1/2 PSC–1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each -Inshot 1-29		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burner (No.—Type) Burner Orifices (No.—Drill Size), Natural	N. 1: 9 1.5 & 1.3 1.725 6.5 2.4—3 46 Pitch L 2 1/2 PSC—1075 2.9 Each 4— 4 24-VI	152 336 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2–22 1/2 PSC-1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each 1-29 1-45 Redundant		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane	N. 1: 9 1.5 & 1.3 1.725 6.5 2.4-3 46 Pitch L 2 1/2 PSC-1075 2.9 Each 4- 4 24-VI Cross	152 336 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each -Inshot -29 -45 Redundant	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2—22 1/2 PSC—1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each 1-1shot 1-29 1-45 Redundant		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane Main Gas Valve Pilot (Non-100%) Pilot (Ignition	No. 11.5 & 1.3 1.5 & 1.3 1.725 6.5 2.4-3 46 Pitch L 2 1.2 2-22 1/2 PSC-1075 2.9 Each 4-4 4 24-V I Cross	152 336 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each -Inshot -29 -45 Redundant over Tube	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2–22 1/2 PSC-1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each -Inshot 1-29 -45 Redundant over Tube		
Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR FOLL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane Main Gas Valve Pilot (Non-100%) Pilot Ignition High Limit	No. 11 11 12 1.5 & 1.3 1.725 6.5 2.4—3 46 Pitch L 2 1 2—22 1/2 PSC—1075 2.9 Each 4— 4 24-VI Crosss Cutout 17	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each Inshot -29 -45 Redundant over Tube Spark 70, Reset 140	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2–22 1/2 PSC-1075 2.9 Each 4- 24-V Cross	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each 1-1shot 1-29 1-45 Redundant		
Required Filter Area (Sq In)** Disposable Type Cleanable or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR GOIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane Main Gas Valve Pilot (Non-10%) Pilot Ignition	N. 11 9 1.5 & 1.3 1.725 6.5 6.5 2.4—3 46 Pitch L 2 1/2 PSC—1075 2.9 Each 4 4 24-V I Cross Cutout 17 Mani	152 336 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each -Inshot -29 -45 Redundant over Tube	1.5 & 1.3 1725 6.5 2.4— 46 Pitch 2 2–22 1/2 PSC-1075 2.9 Each 4- 24-V Cross Cutout 1	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 15.6 2-22 1/2 PSC-1075 1.5 Each -Inshot 1-29 1-45 Redundant over Tube Spark 70, Reset 140		

^{*}Rated in accordance with ARI Standard 210-81
†Rated in accordance with ARI Standard 270-82
‡If other than 75°C copper wire is used, determine size from unit ampacity and the National Electrical Code Voltage drop of wire must be less than 2% of unit rated voltage Maximum wire length shown is for one way along the wire path from unit to electrical service panel
**Model 585E only Model 579D is equipped with two 20- x 20- x 2-inch and two 16- x 20- x 2-inch filters

DUCT CONNECTION SIZES TO CURB





MODEL 579D ROOF-MOUNTING CURB P/N 307175-106

DETAILED NET COOLING CAPACITIES

Evapora	tor									CONDENS	OR AIR T	EMPERAT	URE (°F								
Air				85					95					105					115		
Ft ²		Capa	city			Total	Capa	acity			Total	Capa	icity			Total	Capa	city			Total
per	٥F	MB	luh			Sys	MB	tuh	1		Sys	MB	tuh			Sys	MB	tuh			Sys
Min	WB	Total	Sens	LDB	LWB	KW	Total	Sens	LDB	LWB	KW	Total	Sens	LDB	LWB	KW	Total	Sens	LDB	LWB	KW
MODELS	5 585E	& 5790)																		
2350	71	96 8	50 4	60 2	58 7	10 3	95 4	50 3	60 3	58 9	11 1	91 0	48 8	60 9	59 5	11 7	80 9	45 1	62 3	61 0	12 4
	67	93 2	62 1	55 6	54 0	10 2	89 2	60 9	56 1	54 6	10 8	80 0	57 1	57 6	56 0	11 4	69 5	52 9	59 3	57 6	12 0
	63	87.2	72.7	51.5	49.7	10.0	79.0	69.0	52.9	51.1	10.6	69.0	64.3	54.8	52.7	11.2	58.8	58.7	57.0	54.4	11.8
2500	71	97 4	51 3	61 1	59.5	10 4	96 2	51.4	61 1	59 6	11 2	91 9	50 0	61 6	60 2	11 8	81 8	46.3	62 9	61 5	12 5
	67	93 5	63 4	56 6	54.8	10 3	90 2	62 6	56.9	55 3	10 9	81 2	59 0	58 2	56.6	11 5	70 5	54.8	59 8	58 1	12 1
	63	88.0	74.9	52.4	50.4	10.1	80.4	71.5	53.6	51.6	10.7	70.3	66.7	55.4	53.2	11.3	60.3	60.3	57.8	54.7	11.9
2750	71	97 2	52 1	62 5	60 7	10 5	97 2	53 0	62 2	60 7	11 3	93 1	51 8	62 6	61 2	12 0	83 5	48 5	63 8	62 3	12 6
	67	94 0	65.5	58 0	56 0	10 4	91 2	65 3	58 1	56 3	11 1	83 0	62 1	59 2	57 4	11 7	72 1	57 9	60 6	58 8	12 3
	63	89.2	78.3	53.8	51.5	10.2	82.6	75.5	54.7	52.5	10.8	72.5	70.4	56.4	53.9	11.4	64.0	64.0	58.6	55.0	12.1
3000	71	98 1	53.5	63 6	61 5	10.7	97 0	54 1	63 4	61 6	11 4	94 0	53 6	63 5	62 0	12 2	84.8	50 5	64 5	62 9	12 8
	67	95 1	68 1	59 1	56 9	10 6	92 0	67.8	59 2	57 2	11 2	84 6	65 2	60 0	58 1	11 8	73.5	60 9	61 3	59 3	12 4
	63	90.3	81.5	55.0	52.4	10.4	84.5	79.2	55.7	53.2	11.0	74.4	73.6	57.4	54.5	11.6	67.4	67.4	59.3	55.3	12.2
3250	71	98 9	55 0	64 4	62.2	10 8	97 5	55 6	64 2	62 4	11 6	94 4	55 1	64 4	62 7	12 3	86 2	52 5	65 1	63 5	12 9
	67	95 1	69 8	60 2	57 7	10 6	92 8	70 3	60 1	58 0	11 4	86 0	68 1	60 7	58.7	12 0	74 9	63 7	61 9	59 8	12 6
	63	91.1	84.4	56.1	53.2	10.5	86.2	82.7	56.6	53.8	11.2	76.3	76.3	58.4	54.9	11.8	69.0	69.0	60.4	55.8	12.4
3500	71	98 2	55 4	65 4	63 0	10 9	97 9	56 9	65 0	63 0	11 7	94 4	56 4	65 1	63 3	12 4	87 3	54 5	65 7	63 9	13 1
	67	95 9	72 2	61 0	58 4	10 8	93 4	72 8	60 8	58 6	11 5	87 1	70 9	61 3	59 2	12 1	76 1	66 4	62 5	60 3	12 7
	63	91.8	87.0	57.1	53.9	10.7	88.0	85.9	57.4	54.3	11.3	78.6	78.6	59.3	55.3	12.0	70.8	70.8	61.3	56.1	12.6

NOTES:

- 1 Sensible heat capacities shown are based on 80°F entering air at the indoor coil
- 2 Direct interpolation is permissible Do not extrapolate

- 3 To interpolate:
 - (a) below 80°F DB, subtract 805 Btuh per 1000 Ft³/Min for each degree below 80°F from the listed sensible capacity
 - (b) **above 80° DB**, add 804 Btuh per 1000 Ft³/Min for each degree above 80° F to the listed sensible capacity

MODEL 585E AIR DELIVERY AT INDICATED E.S.P. (In. wc)—WITH WET COIL AND NO AIR FILTERS

	ľ					1.5	-HP Moto	r, 1.3 Se	rvice Fact	lor, 1.95	Max BHP	850-1	200-RPM	Drive Ra	nge					
Airflow	0.	1	0.	.2	0.	.3	0	.4	0	.5	0.	.6	0.	.7	0	.8	0	.9	1.	.0
(Ft²/Min)	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2350	300	0.68	?35	0.71	765	0.77	795	0.81	\$20	0.84	850	0.90	885	0.96	920	1.01	940	1.05	970	1.11
2500	730	0.76	755	0.80	785	0.84	810	88.0	840	0.93	870	0.99	905	1.02	935	1.09	970	1.16	1005	1.23
2750	780	0.80	805	0.94	830	0.98	860	1.03	890	1.08	920	1.12	950	1.19	985	1.26	1020	1.32	1035	1.50
3000	830	3.08	865	1.13	885	1.17	920	1.22	945	1.27	960	1.41	988	1.56	1025	1.67	1050	1.73	1075	1.82
3250	885	1.27	905	1.51	940	1.58	970	1.70	1005	1.81	1030	1.87	1060	1.94	~		}		-	~
3500	935	1.71	970	1.82	1010	1.89	-	_ ~	30.00	-				-				-	-	

- E S P. = External Static Pressure
- RPM = Blower fan revolutions per minute
- BHP = Brake horsepower
- NOTES: 1. Shaded portions of table are beyond standard drive range or motor horsepower at rated voltage.
 - See "Motor Pulley Settings" table for pulley setting to obtain required blower fan RPM for desired airflow
 Pressure drop of field-supplied filters must be included in duct system external static pressure

MODEL 579D AIR DELIVERY AT INDICATED E.S.P. (In. wc)—WITH WET COIL AND STANDARD AIR FILTERS

	1	·				1.5	-HP M oto	r, 1.3 Se	rvice Fac	tor, 1.95	Max BHP	, 850—1	200-RPM	Drive Ra	nge	•				
Airflow	0	.1	0.	2	0.	.3	0.	.4	0.	.5	0.	.6	0.	.7	0.	.8	0.	9	1.	.0
(Ft³/Min)	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2350	710	0.69	750	3.73	783	0.80	810	0.84	835	0.85	865	0.93	895	0.98	935	1.03	950	1.08	985	1.15
2500	745	0.78	770	0.83	800	0.87	825	0.92	855	0.97	885	1.00	920	1.05	950	1.11	985	1.18	1020	1.25
2750	795	0.93	620	3,97	845	1.01	880	1.07	910	1.11	940	1.17	970	1.24	1005	1.31	1035	1.38	1040	1.57
3000	850	1.11	885	1.17	910	1.24	935	1.30	960	1.50	990	1.58	1015	1.64	1047	1.74	1075	1.82	1080	1.91
3250	910	1.50	940	1.60	970	1.68	995	1.70	1025	1.85	1060	1.95		~~				~	-	-
3500	935	1.71	970	1.82	1010	1.89	-	-	- A	}	— . :		ار خدود			. ~	~	~	-	-

- E S.P = External Static Pressure.
- RPM = Blower fan revolutions per minute
- BHP = Brake horsepower
- NOTES: 1. Shaded portions of table are beyond standard drive range or motor horsepower at rated voltage
 - 2 See "Motor Pulley Settings" table for pulley setting to obtain required blower fan RPM for desired airflow
 - 3 See "Accessories Pressure Drops" table for economizer and wet coil pressure drops

ACCESSORIES & OPTIONAL EQUIPMENT

Used With Model	Kit Description	Kit P/N
579D	Roof Mounting Curb	307175-106
579D	Manual Outside-Air Damper*	307178-101
579D	Two-Position Damper Motor†	307180-101
579D	Modulating Economizer‡	307182-101
579D & 585E	LP-Conversion Kit (090203)	307188-102
579D & 585E	LP-Conversion Kit (090146)	307188-101

- *Provides up to 35% outside air
- †For use with manual outside-air damper
- ‡Includes rain hood and relief-air damper.

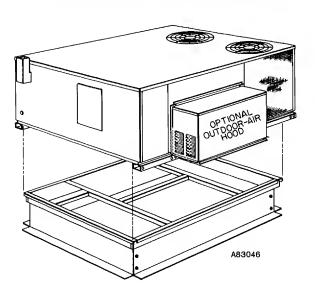
ACCESSORIES PRESSURE DROPS

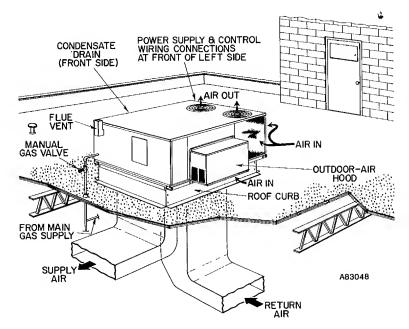
Airflow (Ft³/Min)	Economizer PD (in. wc)	Wet Coil PD (In. wc)
2350	0.012	0.038
2500	0.014	0.042
2750	0.018	0.052
3000	0.020	0.062
3250	0.024	0.072
3500	0.028	0.082

FAN RPM AT MOTOR PULLEY SETTINGS

Motor Pulley	Blower
Turns Open	Fan RPM
0	1200
1/2	1165
1	1130
1-1/2	1095
2	1060
2-1/2	1025
3	990
3-1/2	955
4	920
4-1/2	885
5	850

MODEL 579D—TYPICAL APPLICATION





ENGINEER'S SPECIFICATION GUIDE

GENERAL: Furnish and install a self-contained electric cooling/ gas heating Model 585E Rooftop Unit with horizontal supply- and return-air connections, or install a Model 579D mounted on a full perimeter factory-supplied curb with supply- and return-air ducts connected within the curb. Holes shall be provided in unit baserails for rigging and lifting operations. Units shall be shipped fully charged with oil and R-22 refrigerant. Unit design shall be A.G.A. certified and labeled accordingly.

COOLING CAPACITY: Total net cooling capacity of the unit shall be _______Btuh or greater, and sensible capacity shall be _______Btuh or greater at conditions of _______Ft³/Min evaporator air entering unit at _______°F dry bulb, ______°F wet bulb and condenser entering air of _______°F dry bulb. Total power consumption shall not exceed ______KWH. The EER at design conditions shall be a minimum of ______Btuh/watt. The unit shall be capable of cooling operation down to 45°F. Two-stage cooling shall be provided.

HEATING CAPACITY: Total heating capacity of the unit shall be ______Btuh maximum input. First-stage heating input shall be _____Btuh.

CABINET: The cabinet shall be constructed of heavy-gauge zinc-coated galvanized steel with Malibu Beige baked enamel finish. Unit shall be capable of firing natural (propane) gas as certified by A.G.A.

COMPRESSORS: Both compressors shall be of the welded, fully hermetic type with crankcase heaters and suitable vibration isolators. A separate refrigerant circuit shall be provided for each compressor.

CONDENSER SECTION: The condenser coil shall be constructed of aluminum plate fins mechanically bonded to seamless copper tubes. The condenser fans shall be direct-driven propeller type and mounted for vertical air discharge.

EVAPORATOR SECTION: The evaporator coil shall be constructed of aluminum plate fins mechanically bonded to seamless copper tubes. The evaporator fan shall be of the forward curved centrifugal type, belt driven. Adjustment of airflow shall be accomplished by means of an adjustable pitch pulley.

GAS HEATING SECTION: The unit shall be equipped with an aluminized steel, 4-pass tubular heat exchanger. Gas controls shall include a two-stage redundant gas valve/regulator, an intermittent pilot ignition system, high-limit switch, and a time-delay neating relay. Combustion air shall be induced by a power venting fan capable of handling 100% of flue gas products. The power venter shall include a centrifugal end switch to prove operation of the power venter fan before allowing ignition.

CONTROL CIRCUIT: The unit control panel shall be prewired in the unit casing—furnished with a 24-V control transformer, low-pressure switches, compressor, condenser, and evaporator fan motor contactors, as well as other protective devices.

ADDITIONAL EQUIPMENT (MODEL 579D): A full roof curb shall be provided. Curb design shall provide for connection of ductwork to the curb before unit placement.

A manual outside-air damper, complete with birdscreen, shall be furnished for field attachment.

An economizer control shall be factory-assembled and installed in the unit. The economizer control shall maintain a fixed supply-air temperature during the "free" cooling operation by providing for full modulation of the operable outside- and return-air dampers. The package shall be complete with necessary dampers, linkage, and spring-return modulating damper motor. The economizer controls shall include an enthalpy control capable of controlling the dampers by measuring the heat content of the outside air.

APPROVALS: The unit shall be A.G.A. certified as an electric cooling/gas heating outdoor unit. All wiring shall be in compliance with N E.C. The unit shall be certified by ARI for cooling capacity and noise ratings.

Bryant
Air Conditioning

BDP
Indianapolis, IN
City of Industry, CA

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS



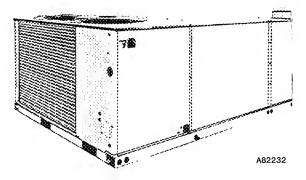
Day&Night Air Conditioning

Indianapolis, IN City of Industry, CA

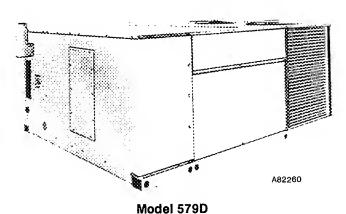
GAS HEATING/ ELECTRIC COOLING ROOFTOP UNIT

Models 585E & 579D

Sizes 090146 & 090203



Model 585E



Models 579D and 585E Gas Heating/Electric Cooling Rooftop Units are single-packaged units designed for the commercial market. Both models present a low profile and do not distract from the architecture of the building.

MODEL 585E is designed for horizontal side-by-side duct connections and can be installed at ground level or on a roof. The 585E is ideal for the replacement market.

MODEL 579D has the supply- and return-air openings on the bottom of the unit. The 579D is designed for rooftop installation and mounts on a factory-supplied, roof-mounting curb. The ductwork connects to the curb so that the air ducts and curb can be installed before unit arrival.

FEATURES

FACTORY-ASSEMBLED PACKAGE is a compact, fully self-contained, combination gas heating/electric cooling unit that is prewired, prepiped, and precharged for minimum installation time and expense.

TWO RUGGED, HIGH-EFFICIENCY COMPRESSORS provide two-stage cooling to conserve energy by shutting down one compressor during light cooling loads. These compressors are electrically and mechanically independent; therefore, cooling is still available even if one stage fails.

LOW-PRESSURE PROTECTION is standard

TWO-STAGE HEATING AND TWO-STAGE COOLING reduces equipment cycling and gives better control of the conditioned space temperature and humidity.

INTERMITTENT SPARK IGNITION that lights pilot only on a "call for heat" by the indoor thermostat An LP (propane) conversion kit is available for both models

HIGH-EFFICIENCY, FOUR-PASS HEAT EXCHANGER—The four-pass tubular heat exchanger design provides maximum heat transfer to the heated area.

POSITIVE-PRESSURE COMBUSTION AND MECHANICAL FLUE GAS VENTING are unaffected by adverse wind conditions

CRANKCASE HEATERS AND FILTER-DRIERS are standard on both models.

WEATHERIZED CABINETS are constructed of heavy-duty, phosphated, zinc-coated steel and finished with corrosion-resistant, modified alkyd, fade-resistant, baked Malibu Beige enamel. Interior surfaces of the evaporator/heat exchanger compartment are insulated to help keep the conditioned air from being affected by the outdoor ambient temperature

VERTICAL CONDENSER AIR DISCHARGE prevents recirculation of hot condenser air and reduces operating noise level.

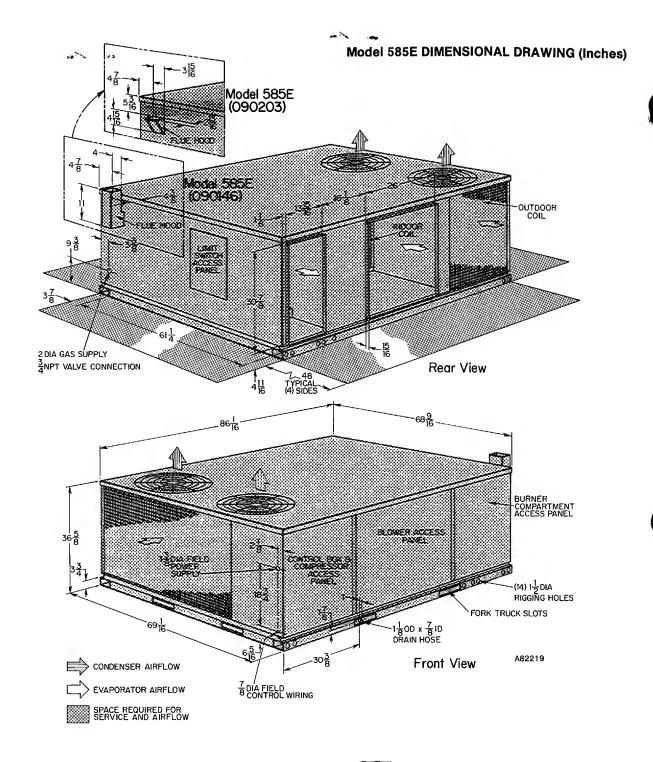
COMPRESSOR ISOLATION MOUNTING eliminates vibration (noise) transmission to building structure.

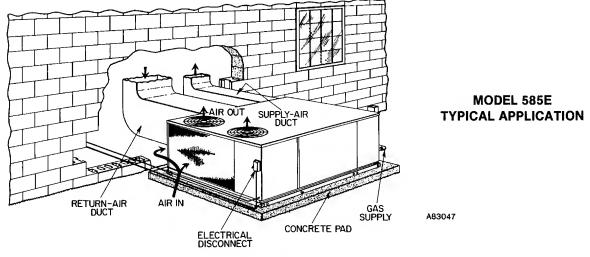
CORROSION-RESISTANT HEAT EXCHANGERS AND BURN-ERS for longer life.

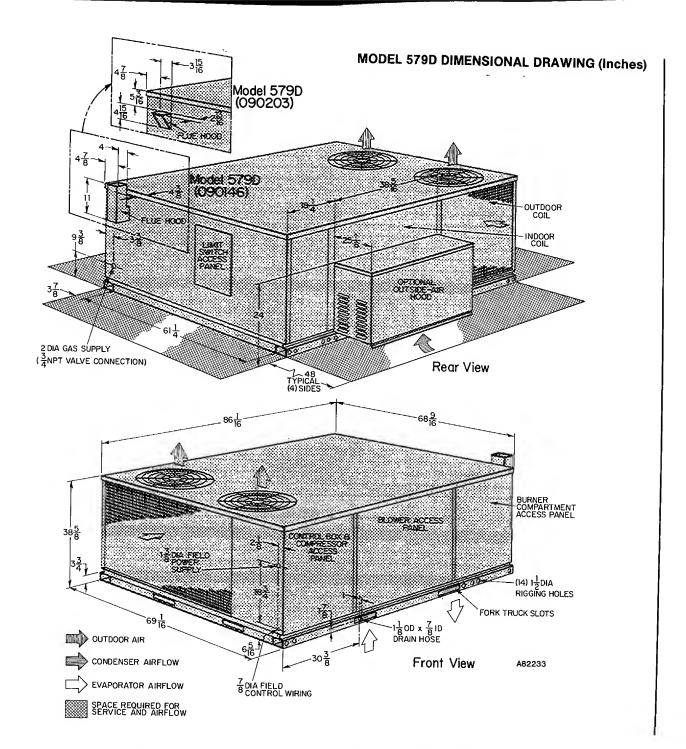
FURNACE SAFETY CONTROLS shut off gas in event of pilot outage, combustion-air failure, overheating of heat exchangers, or flame rollout.

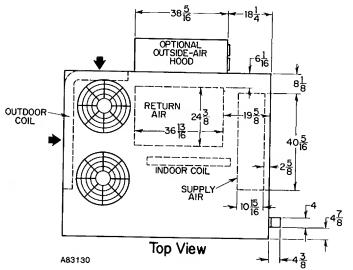
PROTECTION AS REQUIRED BY N.E.C. for fan motors

COMPROTEC®—standard on both models, prevents compressor rapid-cycling.





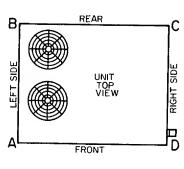




UNIT OPERATING AND CORNER WEIGHTS

Operating		Corner	Weights	
Weight	Α	В	С	D
1180*	367	244	228	341

*Add 60 pounds to unit if equipped with modulating economizer



AODEL	585EP090146 C	585EE090146 C	5790P090146 C	579DE090146 C		
ERIES RATINGS & PERFORMANCE			0			
Cooling		,,,		· · · · · · · · · · · · · · · · · · ·		
Total Capacity (Btuh)*	92,0	000	92,0			
Capacity Reduction	509	%	50			
Rated Airflow (Ft³/Min)*	300	00	30			
Rated ESP (In. wc)*	0.2		0.2			
EER	8.3		8.2 9.0			
ARI Noise Rating†	9.0	0	9.	0		
leating			06	000		
1st-Stage Input (Btuh)	86,			000 600		
1st-Stage Output (Btuh)		600	146,			
1st- & 2nd-Stage Input (Btuh)	146, 116.		116,			
1st- & 2nd Stage Output (Btuh)	20-		20-			
Temperature Rise Range (°F)	80		8			
Thermal Efficiency (%)	1.		1.			
Certified ESP (In. wc)	1.					
Init Volts—Phase (60 Hz)	208/230-3	460-3	208/230-3	460-3		
Operating Voltage Range	187—253	414-506	187-253	414-506		
Init Full Load Amps	42.7	20.7	42.7	20.7		
Aln Ampacity for Wire Sizing	48	23	48	23		
Ain Wire Size (75°C Copper)‡	6	10	6	10		
Max Wire Length (Ft)‡	140	255	140	255		
Max Fuse Size (Amps)	60	25	60	25		
Control Transformer, 24-V (VA)	75	75	75	75		
COMPRESSOR, REFRIGERANT, & CONTROLS						
Compressor No. 1 (Type—RPM)	Hermetic—3500	Hermetic — 3500	Hermetic — 3500	Hermetic—3500		
Rated Load Amps	15.2	7.2	15.2	7.2		
Locked Rotor Amps	80	35	80	35		
Compressor No. 2 (Type—RPM)	Hermetic-3500	Hermetic—3500	Hermetic — 3500	Hermetic-3500		
Rated Load Amps	15.2	7.2	15.2	7.2		
Locked Rotor Amps	80	35	80	35		
Compressor Protection	Internal L			inebreak		
Low-Pressure Switch (PSIG)	Cutout 27			, Reset 67		
Low-Ambient Operation (°F)	4	5	45			
Refrigerant Charge				•		
Compressor No. 1 Circuit		3 0 Z		3 oz		
Compressor No. 2 Circuit	6 lbs	3 0Z	6 105	3 oz		
INDOOR COIL		16	1	45		
Rows & Fins per Inch		15		. 15 .9		
Coll Face Area (Sq Ft)		.9		y Tubes		
Refrigerant Metering Device	Capillar	y Tubes	Capillai	y rubes		
INDOOR BLOWER & MOTOR	10	x 12	12	x 12		
Wheel Dia & Width (In.)		3/4		3/4		
Blower Pulley Pitch Dia & Bore (In.)		one		, (2) 20 x 20 x 2		
Factory-Supplied Filters (In.)	190	JIIC	(2) 10 × 20 × 2	, (L) LO X LO X L		
Required Filter Area (Sq In)**	11	152		-		
Disposable Type Cleanable- or High-Capacity Type		36				
Blower Motor HP & SF	1.5 & 1.3	1.5 & 1.3	1.5 & 1.3	1.5 & 1.3		
Speed (Nominal RPM)	1725	1725	1725	1725		
Full Load Amps	6.5	3.3	6.5	3.3		
Motor Pulley Pitch Dia & Bore (In.)		.4 & 5/8		.4 & 5/8		
Belt Length & Width (In.)		ength & 1/2	46 Pitch L	ength & 1/2		
OUTDOOR COIL		- 3				
Rows & Fins per Inch	2 8	ß 14	2 .	§ 14		
Coil Face Area (Sq Ft)	1!	5.6	1	5.6		
OUTDOOR FAN & MOTOR						
Outdoor Fans, No.—Dia	2—22	2-22	2-22	2-22		
Motor HP	1/2	1/2	1/2	1/2		
Type—Speed	PSC-1075	PSC-1075	PSC-1075	PSC-1075		
Full Load Amps	2.9 Each	1.5 Each	2.9 Each	1.5 Each		
GAS CONTROLS & GENERAL DATA		land at	1	Inchat		
Burners (No.—Type)		Inshot		Inshot -33		
Burner Orifices (No.—Drill Size), Natural		-33		-50		
	4-	-50		edundant		
Burner Orifices (No Drill Size), Propane	0/115	CUUNUANI				
Main Gas Valve	24-V R		Crossover Tube			
Main Gas Valve Pilot (Non-100%)	Crosso	ver Tube				
Main Gas Valve Pilot (Non-100%) Pilot Ignition	Crosso Sp	ver Tube park	S	park		
Main Gas Valve Pilot (Non-100%) Pilot Ignition High Limit	Crosso Sp Cutout 11	over Tube park O, Reset 90	S Cutout 11	park 0, Reset 90		
Main Gas Valve Pilot (Non-100%) Pilot Ignition	Crosso Sp Cutout 11 Manu	ver Tube park	S Cutout 11 Manu	park		

^{*}Rated in accordance with ARI Standard 210-81.







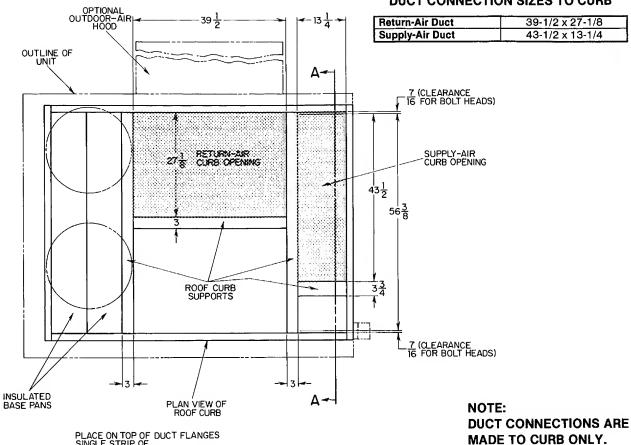
[†]Rated in accordance with ARI Standard 270-82
†Rated in accordance with ARI Standard 270-82
‡If other than 75°C copper wire is used, determine size from unit ampacity and the National Electrical Code. Voltage drop of wire must be less than 2% of unit rated voltage Maximum wire length shown is for one way along the wire path from unit to electrical service panel
**Model 585E only Model 579D is equipped with two 20- x 20- x 2-inch and two 16- x 20- x 2-inch filters

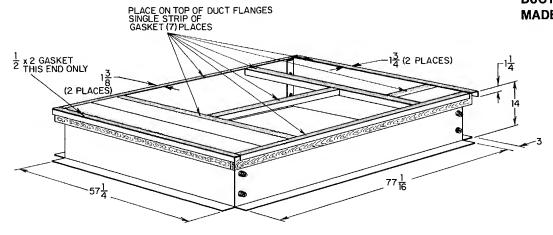
ODEL	585EP090203	585EE090203	579DP090203	579DE090203		
ERIES	С	C	G	Ü		
ATINGS & PERFORMANCE						
ooling			92,0	100		
Total Capacity (Btuh)*	92,0		50			
Capacity Reduction	50%		300			
Rated Airflow (Ft³/Min)*	300					
Rated ESP (In. wc)*	0.2		0.2			
EER	8.2		8.:			
ARI Noise Rating†	9.0	0	9,	<u> </u>		
eating						
1st-Stage input (Btuh)	125,	000	125,000 92,500			
1st-Stage Output (Btuh)	92,	500				
1st- & 2nd-Stage Input (Btuh)	203,	000	203,			
1st- & 2nd-Stage Output (Btuh)	160,	370	160,			
Temperature Rise Range (°F)	35-	-65	35-			
Thermal Efficiency (%)	79	9	7:			
Certified ESP (In. wc)	1.	1	1.	1		
LECTRICAL						
Init Volts—Phase (60 Hz)	208/230-3	460-3	208/230-3	460-3		
	187-253	414-506	187-253	414-506		
perating Voltage Range	42.7	20.7	42.7	20.7		
nit Full Load Amps		23	48	23		
nin Ampacity for Wire Sizing	48	10	6	10		
Ain Wire Size (75°C Copper)‡		255	140	255		
/lax Wire Length (Ft)‡	140		60	25		
Max Fuse Size (Amps)	60	25	75	75		
Control Transformer, 24-V (VA)	75	75	1 /3	10		
COMPRESSOR, REFRIGERANT, & CONTROLS			User sic OFOO	Harmetia 2500		
Compressor No. 1 (Type—RPM)	Hermetic — 3500	Hermetic-3500	Hermetic—3500	Hermetic—3500		
Rated Load Amps	15.2	7.2	15.2	7.2		
Locked Rotor Amps	80	35	80	35		
Compressor No. 2 (Type—RPM)	Hermetic-3500	Hermetic-3500	Hermetic — 3500	Hermetic—3500		
Rated Load Amps	15.2	7.2	15.2	7.2		
Locked Rotor Amps	80	35	80	35		
		Linebreak	Internal	Linebreak		
Compressor Protection		Reset 67	Cutout 27, Reset 67			
Low-Pressure Switch (PSIG)		15		15		
Low-Ambient Operation (°F)		13				
Refrigerant Charge	0.11.	0	6 lbs	3 3 oz		
Compressor No. 1 Circuit		3 3 oz		3 3 0z		
Compressor No. 2 Circuit	6 IDS	s 3 oz	O IDS	30 02		
INDOOR COIL		45	3.8	k 15		
Rows & Fins per Inch		3.15		7.9		
Coil Face Area (Sq Ft)		7.9		ry Tubes		
Refrigerant Metering Device	Capillar	ry Tubes	Сарша	y rubes		
INDOOR BLOWER & MOTOR			10	v 10		
Wheel Dia & Width (In.)	1 10	x 12		x 12		
Blower Pulley Pitch Dia & Bore (In.)			1 58	3/4		
		k 3/4				
	5 &	k 3/4 one	(2) 16 x 20 x 2	, (2) 20 × 20 × 2		
Factory-Supplied Filters (In.)	5 &		(2) 16 x 20 x 2	, (2) 20 x 20 x 2		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)**	5 & No.	one	(2) 16 × 20 × 2	, (2) 20 × 20 × 2		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type	5 & No.	one 152		, (2) 20 × 20 × 2 		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type	5 & No.	152 136		_		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF	5 & No. 11 9 1.5 & 1.3	152 136 1.5 & 1.3	1.5 & 1.3	_		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM)	5 & No	one 152 136 1.5 & 1.3 1725	1.5 & 1.3 1725	1.5 & 1.3 1725		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps	5 & No. 11 9 1.5 & 1.3 1725 6.5	one 152 136 1.5 & 1.3 1725 3.3	1.5 & 1.3 1725 6.5	1.5 & 1.3 1725 3.3		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.)	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3	152 136 1.5 & 1.3 1725 3.3	1.5 & 1.3 1725 6.5	1.5 & 1.3 1725 3.3 3.4 & 5/8		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.)	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3	one 152 136 1.5 & 1.3 1725 3.3	1.5 & 1.3 1725 6.5	1.5 & 1.3 1725 3.3		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	152 36 1.5 & 1.3 1725 3.3 1.4 & 5/8 Length & 1/2	1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (in.) OUTDOOR COIL	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	one 152 136 1.5 & 1.3 1725 3.3 4.4 & 5/8 Length & 1/2	1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	1.5 & 1.3 1725 3.3 3.3 3.4 & 5/8 ength & 1/2		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COLL Rows & Fins per Inch Coll Face Area (Sq Ft)	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	152 36 1.5 & 1.3 1725 3.3 1.4 & 5/8	1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.)	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L	152 136 1.5 & 1.3 1725 3.3 1.4 & 5/8 ength & 1/2	1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6	1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2 2 4 1 2-22 1/2	1.52 36 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2 - 1 2–22 1/2	1.5 & 1.3 1725 3.3 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L	152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2 - 1 2–22 1/2 PSC-1075	1.5 & 1.3 1725 3.3 3.4 & 5/8 Length & 1/2 & 14 5.6 2-22 1/2 PSC-1075		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2 2 4 1 2-22 1/2	1.52 36 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2 - 1 2–22 1/2	1.5 & 1.3 1725 3.3 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps	5 8 No 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2-22 1/2 PSC-1075	one 152 136 1.5 & 1.3 1725 3.3 1.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2 - 22 1/2 PSC-1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2 2 4 1/2 PSC-1075 2.9 Each	one 152 136 1.5 & 1.3 1725 3.3 1.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2 1 2 – 22 1/2 PSC – 1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type)	5 & No. 11 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2 & 1 2 — 22 1/2 PSC—1075 2.9 Each	one 152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2 1 2 – 22 1/2 PSC – 1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural	5 8 No 111 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2-22 1/2 PSC-1075 2.9 Each	152 136 1.5 & 1.3 1725 3.3 1.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2-22 1/2 PSC-1075 2.9 Each	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane	5 8 No 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2-22 1/2 PSC-1075 2.9 Each	one 152 136 1.5 & 1.3 1725 3.3 1.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each	1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2-22 1/2 PSC-1075 2.9 Each	1.5 & 1.3 1725 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane Main Gas Valve	5 8 No 11 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2-22 1/2 PSC-1075 2.9 Each 4- 4- 4- 4- 24-V R	one 152 136 1.5 & 1.3 1725 3.3 1.4 & 5/8 Length & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each Inshot -29 -45 Redundant	1.5 & 1.3 1725 6.5 2.4–3 46 Pitch L 2-22 1/2 PSC-1075 2.9 Each 4-4 44-4	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COIL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane Main Gas Valve Pilot (Non-100%)	5 8 No 11 9 1.5 & 1.3 1.725 6.5 2.4—3 46 Pitch L 2-22 1/2 PSC—1075 2.9 Each 4— 4- 4- 24-V R Crosso	one 152 136 1.5 & 1.3 1725 3.3 .4 & 5/8 .ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each Inshot -29 -45 Redundant over Tube	1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2 - 22 1/2 PSC-1075 2.9 Each 4— 4 24-VF Crossu	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOOR COL Rows & Fins per Inch Coil Face Area (Sq Ft) OUTDOOR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane Main Gas Valve Pilot (Non-100%) Pilot Ignition	5 & No. 111 9 1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 22 1/2 PSC—1075 2.9 Each 4—4 4. 24-V R Crossc	152 136 1.5 & 1.3 1725 3.3 1.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each Inshot -29 -45 edundant over Tube	1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2-22 1/2 PSC—1075 2.9 Each 4— 4 24-V F	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
Factory-Supplied Filters (In.) Required Filter Area (Sq In)** Disposable Type Cleanable- or High-Capacity Type Blower Motor HP & SF Speed (Nominal RPM) Full Load Amps Motor Pulley Pitch Dia & Bore (In.) Belt Length & Width (In.) OUTDOGR COLL Rows & Fins per Inch Coll Face Area (Sq Ft) OUTDOGR FAN & MOTOR Outdoor Fans, No.—Dia Motor HP Type—Speed Full Load Amps GAS CONTROLS & GENERAL DATA Burners (No.—Type) Burner Orifices (No.—Drill Size), Natural Burner Orifices (No.—Drill Size), Propane Main Gas Valve Pilot (Non-10%) Pilot Ignition High Limit	5 8 No 111 9 1.5 & 1.3 1725 6.5 2.4-3 46 Pitch L 2-22 1/2 PSC-1075 2.9 Each 4- 4- 4- 24-V R Crossc S Cutout 17	one 152 136 1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each Inshot -29 -45 Redundant over Tube ipark 0, Reset 140	1.5 & 1.3 1725 6.5 2.4—3 46 Pitch L 2-22 1/2 PSC—1075 2.9 Each 4— 4 44 24-V F Crosso S Cutout 17	1.5 & 1.3 1725 3.3 3.4 & 5/8 ength & 1/2 & 14 5.6 2-22 1/2 PSC-1075 1.5 Each		
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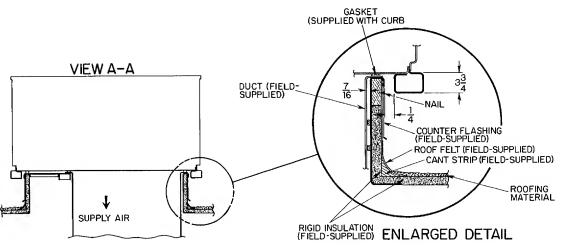
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^{*}Rated in accordance with ARI Standard 210-81
†Rated in accordance with ARI Standard 270-82
‡If other than 75°C copper wire is used, determine size from unit ampacity and the National Electrical Code Voltage drop of wire must be less than 2% of unit rated voltage Maximum wire length shown is for one way along the wire path from unit to electrical service panel
**Model 585E only Model 579D is equipped with two 20- x 20- x 2-inch and two 16- x 20- x 2-inch filters

DUCT CONNECTION SIZES TO CURB







A83006

DETAILED NET COOLING CAPACITIES

Evapor	ator							-		CONDENS	SOR AIR T	EMPERA	TURE (°F	1							
Air				85					95			Ī		105			1		115		
Ft ³ per Min	°F WB	Capa MB Total	tuh Sens	LDB	11110	Total Sys	ME	acity Ituh			Total Sys	ME	acity Ituh			Total Sys		acity tuh			Total Sys
MODELS				LUB	LWB	KW	Total	Sens	LDB	LWB	KW	Total	Sens	LOB	LWB	KW	Total	Sens	LDB	LWB	KW
2350	71 67 63	96.8 93.2 87.2	50 4 62 1 72.7	60 2 55 6 51.5	58 7 54 0 49.7	10 3 10 2 10.0	95 4 89 2 79.0	50.3 60 9 69.0	60 3 56 1 52.9	58 9 54 6 51.1	11 1 10 8 10.6	91 0 80 0 69.0	48.8 57 1 64.3	60 9 57 6 54.8	59 5 56.0 52.7	11 7	80 9 69 5	45 1 52 9	62 3 59 3	61 0 57 6	12 4 12 0
2500	71 67 63	97.4 93.5 88.0	51 3 63 4 74.9	61 1 56 6 52.4	59 5 54 8 50.4	10 4 10 3 10.1	96 2 90 2 80.4	51 4 62 6 71.5	61 1 56 9 53.6	59.6 55.3 51.6	11.2 10.9 10.7	91 9 81 2 70.3	50.0 59.0 66.7	61 6 58 2 55.4	60 2 56 6 53.2	11.2 11.8 11.5 11.3	58.8 81.8 70.5 60.3	58.7 46.3 54.8 60.3	57.0 62 9 59 8 57.8	54.4 61.5 58.1	11.8 12.5 12.1
2750	71 67 63	97 2 94 0 89.2	52 † 65 5 78.3	62 5 58 0 53.8	60 7 56.0 51.5	10 5 10 4 10.2	97.2 91 2 82,6	53 0 65 3 75.5	62 2 58.1 54.7	60 7 56 3 52.5	11.3 11.1 10.8	93 1 83 0 72.5	51 8 62 1 70.4	62 6 59 2 56.4	61 2 57 4 53.9	12.0 11.7 11.4	83 5 72 1 64.0	48.5 57 9	63 8 60 6	54.7 62 3 58 8	11.9 12.6 12.3
3000	71 67 63	98.1 95 1 90.3	53 5 68 1 81.5	63 6 59 1 55.0	61 5 56 9 52.4	10 7 10 6 10.4	97.0 92.0 84.5	54 1 67 8 79.2	63 4 59 2 55.7	61 6 57 2 53.2	11 4 11 2 11.0	94 0 84 6 74.4	53 6 65 2 73.6	63.5 60.0 57.4	62 0 58 1 54.5	12.2 11.8 11.6	84 8 73 5 67.4	50.5 60 9	58.6 64.5 61.3	55.0 62 9 59 3	12.1 12.8 12.4
3250	71 67 63	98 9 95 1 91.1	55 0 69 8 84.4	64 4 60 2 56.1	62 2 57 7 53.2	10 8 10 6 10.5	97.5 92.8 86.2	55 6 70 3 82.7	64 2 60 1 56.6	62 4 58 0 53.8	11 6 11 4 11.2	94 4 86 0 76.3	55 1 68 1 76.3	64 4 60.7 58.4	62 7 58 7 54.9	12.3 12.0 11.8	86 2 74 9 69.0	67.4 52.5 63.7 69.0	59.3 65 1 61 9 60.4	55.3 63.5 59.8 55.8	12.2 12.9 12.6
3500	71 67 63	98 2 95 9 91.8	55.4 72.2 87.0	65 4 61 0 57.1	63 0 58 4 53.9	10 9 10 8 10 7	97 9 93 4 88.0	56 9 72 8 85.9	65 0 60 8 57.4	63 0 58 6 54.3	11 7 11 5 11.3	94 4 87 1 78.6	56 4 70 9 78.6	65 1 61 3 59.3	63 3 59.2 55.3	12 4 12 1 12.0	87 3 76 1 70.8	54.5 66 4 70.8	65.7 62.5 61.3	63 9 60 3 56.1	12.4 13.1 12.7 12.6

- Sensible heat capacities shown are based on 80°F entering air at the indoor coil
- 2. Direct interpolation is permissible Do not extrapolate.

- 3 To interpolate:
 - (a) below 80°F DB, subtract 805 Btuh per 1000 Ft3/Min for each degree below 80°F from the listed sensible capacity
 - (b) above 80° DB, add 804 Btuh per 1000 Ft3/Min for each degree above 80°F to the listed sensible capacity

MODEL 585E AIR DELIVERY AT INDICATED E.S.P. (In. wc)—WITH WET COIL AND NO AIR FILTERS

						1.5	-HP Moto	r, 1.3 Se	rvice Fac	tor, 1.95	Max BHP	.850 - 1	200-RPM	Drive Ra	nne					
Airflow	0		0	.2	0	.3		.4		.5		.6	0	-		.8	0.	0	1	.0
(Ft ¹ /Min)	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2350	700	£ 68.	735	0.75	785	6.27	735	0.81	820	0.84	850	0.90	885	0.96	920					BRIT
2500	730	0.78	755	0.83	785	0.84	810	0.88	849	0.93	870	0.99				1.01	940	1.05	970	1.11
2750	780	0.98	80S	0.94		8.98	860						905	1.02	935	1.09	970	1.16	1005	1,23
3000	830	1.08	865			0.30		1.03	890	1.08	920	1.12	950	1.19	985	1.26	1020	1.32	1035	1.50
	*********			1.13	885	1.17	920	1.22	945	1.27	960	1.41	988	1.56	1025	1.67	1050	1.73	1075	1.82
3250	865	1.27	905	1.51	940	1.58	970	1.70	1005	1.81	1030	1.87	1060	1.94					1	+
3500	935	1.71	970	1.82	1010	1.89	911 -	4,24	30-100					~~~~				<u> </u>	}	

E.S P. = External Static Pressure

RPM = Blower fan revolutions per minute

BHP = Brake horsepower

- NOTES: 1. Shaded portions of table are beyond standard drive range or motor horsepower at rated voltage
 - See "Motor Pulley Settings" table for pulley setting to obtain required blower fan RPM for desired airflow 3 Pressure drop of field-supplied filters must be included in duct system external static pressure.

MODEL 579D AIR DELIVERY AT INDICATED E.S.P. (In. wc)—WITH WET COIL AND STANDARD AIR FILTERS

	1.5-HP Motor, 1.3 Service Factor, 1.95 Max BHP, 850—1200 RPM Drive Range																			
Airflow	8.		0	.2	0	.3	0	4		.5		.6	0.	7 /		.8	0	q	1	.0
(Ft³/Min)	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	I BH
2350	710	8.69	750	0.73	780	0.60	810	0.84	835	0.89	865	0.93	895	0.98	935	1.03	950	1.08	985	
2500	745	9.78	778	8.83	809	3.87	825	0.92	855	0.97	885	1.00	920	1.05	950	1.00				1.
2750	795	8:93	820	0.97	545	7.07	880	1.07	910	111	940	1.17	970	1.24	1005	1.11	985	1.18	1020	1.
3000	850	1.11	885	1.17	910	1.24	935	1.30	960	1.50	990					1.31	1035	1.38	1040	1.
3250	910	1.50	940	1.60	970	1.68	995					1.58	1015	1.64	1047	1.74	1075	1.82	1080	1,
3500	935	1.71						1.70	1025	1.85	1060	1.95	-					· · · · · · · ·	20 - 1 00	
3300	935	1.71	970	1.82	1010	1.89	~	- (3)	~	-	-		,					100		ŗ

E S.P. = External Static Pressure

RPM = Blower fan revolutions per minute.

BHP = Brake horsepower

- Shaded portions of table are beyond standard drive range or motor horsepower at rated voltage
 - See "Motor Pulley Settings" table for pulley setting to obtain required blower fan RPM for desired airflow
 - See "Accessories Pressure Drops" table for economizer and wet coil pressure drops.

ACCESSORIES & OPTIONAL EQUIPMENT

Used With Model	Kit Description	Kit P/N
579D	Roof Mounting Curb	307175-106
579D	Manual Outside-Air Damper*	307178-101
579D	Two-Position Damper Motor†	307180-101
579D	Modulating Economizer±	307182-101
579D & 585E	LP-Conversion Kit (090203)	307188-102
579D & 585E	LP-Conversion Kit (090146)	307188-101

- *Provides up to 35% outside air.
- †For use with manual outside-air damper.
- ‡Includes rain hood and relief-air damper.

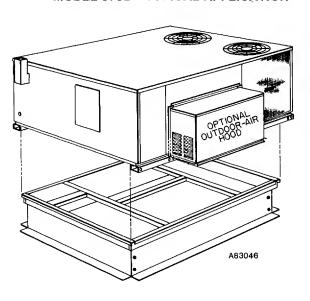
ACCESSORIES PRESSURE DROPS

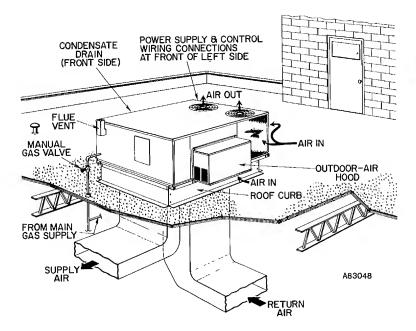
Airflow (Ft³/Min)	Economizer PD (in. wc)	Wet Coil PD (In. wc)
2350	0.012	0.038
2500	0.014	0.042
2750	0.018	0.052
3000	0.020	0.062
3250	0.024	0.072
3500	0.028	0.082

FAN RPM AT MOTOR PULLEY SETTINGS

Motor Pulley Turns Open	Blower Fan RPM
0	1200
1/2	1165
1	1130
1-1/2	1095
2	1060
2-1/2	1025
3	990
3-1/2	955
4	920
4-1/2	885
5	850

MODEL 579D—TYPICAL APPLICATION





ENGINEER'S SPECIFICATION GUIDE

GENERAL: Furnish and install a self-contained electric cooling/ gas heating Model 585E Rooftop Unit with horizontal supply- and return-air connections, or install a Model 579D mounted on a full perimeter factory-supplied curb with supply- and return-air ducts connected within the curb. Holes shall be provided in unit baserails for rigging and lifting operations. Units shall be shipped fully charged with oil and R-22 refrigerant. Unit design shall be A.G.A certified and labeled accordingly.

COOLING CAPACITY: Total net cooling capacity of the unit shall be _______Btuh or greater, and sensible capacity shall be _______Btuh or greater at conditions of ______Ft³/Min evaporator air entering unit at ______°F dry bulb, _____°F wet bulb and condenser entering air of ______°F dry bulb. Total power consumption shall not exceed ______KWH. The EER at design conditions shall be a minimum of ______Btuh/watt. The unit shall be capable of cooling operation down to 45°F. Two-stage cooling shall be provided.

HEATING CAPACITY: Total heating capacity of the unit shall be _______Btuh maximum input. First-stage heating input shall be _______Btuh.

CABINET: The cabinet shall be constructed of heavy-gauge zinc-coated galvanized steel with Malibu Beige baked enamel finish. Unit shall be capable of firing natural (propane) gas as certified by A.G A.

COMPRESSORS: Both compressors shall be of the welded, fully hermetic type with crankcase heaters and suitable vibration isolators. A separate refrigerant circuit shall be provided for each compressor.

CONDENSER SECTION: The condenser coil shall be constructed of aluminum plate fins mechanically bonded to seamless copper tubes. The condenser fans shall be direct-driven propeller type and mounted for vertical air discharge.

EVAPORATOR SECTION: The evaporator coil shall be constructed of aluminum plate fins mechanically bonded to seamless copper tubes. The evaporator fan shall be of the forward curved centrifugal type, belt driven. Adjustment of airflow shall be accomplished by means of an adjustable pitch pulley.

GAS HEATING SECTION: The unit shall be equipped with an aluminized steel, 4-pass tubular heat exchanger Gas controls shall include a two-stage redundant gas valve/regulator, an intermittent pilot ignition system, high-limit switch, and a time-delay neating relay. Combustion air shall be induced by a power venting fan capable of handling 100% of flue gas products. The power venter shall include a centrifugal end switch to prove operation of the power venter fan before allowing ignition.

CONTROL CIRCUIT: The unit control panel shall be prewired in the unit casing—furnished with a 24-V control transformer, low-pressure switches, compressor, condenser, and evaporator fan motor contactors, as well as other protective devices.

ADDITIONAL EQUIPMENT (MODEL 579D): A full roof curb shall be provided. Curb design shall provide for connection of ductwork to the curb before unit placement.

A manual outside-air damper, complete with birdscreen, shall be furnished for field attachment

An economizer control shall be factory-assembled and installed in the unit. The economizer control shall maintain a fixed supply-air temperature during the "free" cooling operation by providing for full modulation of the operable outside- and return-air dampers. The package shall be complete with necessary dampers, linkage, and spring-return modulating damper motor. The economizer controls shall include an enthalpy control capable of controlling the dampers by measuring the heat content of the outside air.

APPROVALS: The unit shall be A.G.A. certified as an electric cooling/gas heating outdoor unit. All wiring shall be in compliance with N.E.C. The unit shall be certified by ARI for cooling capacity and noise ratings.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS